

RECEIVED
CENTRAL FAX CENTER
JAN 03 2008

PATENT

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A personal wireless communication device, comprising:
 - a microphone for sound pickup;
 - a directional speaker for sound output; and
 - a communication module operatively connected to said microphone and said directional ~~ultrasonic~~ speaker, said communication module supporting two-way communications over a wireless channel between said personal wireless communication device and another communication device.
2. (Previously presented) A personal wireless communication device as recited in claim 1, wherein said personal wireless communication device further comprises a standard, non-directional speaker for sound output.
3. (Previously presented) A personal wireless communication device as recited in claim 2, wherein said personal wireless communication device further comprises a controller that controls which speaker or speakers to be used for the sound output.
4. (Previously presented) A personal wireless communication device as recited in claim 3, wherein said personal wireless communication device further comprises at least one sensor, and wherein said controller automatically controls which speaker or speakers to be used for sound output based on information provided by at least said sensor.

PATENT

5. (Previously presented) A personal wireless communication device as recited in claim 1, wherein said personal wireless communication device is a hand-held communication device.

6. (Previously presented) A personal wireless communication device as recited in claim 1, wherein said personal wireless communication device is a personal digital assistant, a personal computer or a mobile telephone.

7. (Previously presented) A personal wireless communication device as recited in claim 1, wherein the sound output is steerable.

8. (Previously presented) A personal wireless communication device as recited in claim 1, wherein said directional speaker is an ultrasonic speaker.

9. (Previously presented) A personal wireless communication device as recited in claim 8, wherein said ultrasonic speaker is selected from a group including a piezoelectric thin film device, a bimorph device and a magnetic transducer.

10. (Previously presented) A personal wireless communication device as recited in claim 8,

wherein said ultrasonic speaker produces a sound output; and

wherein the sound output by said ultrasonic speaker is an ultrasonic sound output but results in audio sound for a user of said personal wireless communication device after the ultrasonic sound output is transformed in air.

11. (Previously presented) A personal wireless communication device as recited in claim 10, wherein said ultrasonic speaker directs the ultrasonic sound output to the user by confining said output substantially within a virtual cone having an input end at said ultrasonic speaker and an output end at the vicinity of the user.

PATENT

12. (Previously presented) A personal wireless communication device as recited in claim 11, the diameter of the virtual cone at the output end is less than 6 inches.

13. (Currently Amended) A peripheral apparatus for an electronic device, said peripheral apparatus comprising:

a directional speaker that provides ultrasonic sound output in a particular predetermined direction,

wherein the ultrasonic sound output by said directional speaker results in audio sound in the particular predetermined direction for a user of the electronic device, and

wherein the electronic device is a personal wireless communication device, and said peripheral apparatus is configured to be removeably connected to the personal wireless communication system.

14. (Currently Amended) A peripheral apparatus as recited in claim 13, wherein the electronic device has a peripheral connection port, and wherein said peripheral apparatus connects to the electronic device at the peripheral connection port, and wherein the peripheral connection port is an electronic card slot or a serial bus port.

15. (Previously presented) A peripheral apparatus as recited in claim 14, wherein said peripheral apparatus further comprises a housing for said peripheral apparatus, and

wherein said peripheral apparatus further comprises a mechanical mechanism that allows said directional speaker to move relative to said housing, thereby allowing repositioning of said directional speaker to direct the sound output towards different directions.

16. (Currently Amended) A peripheral device for a computing device, said peripheral device comprising:

PATENT

a housing; and
a directional speaker coupled to said housing, said directional speaker being configured to provide ultrasonic sound output in a particular direction, wherein the ultrasonic sound output by said directional speaker results in audio sound in the particular direction for a user of said computing device,
and
a port connector configured to assist with coupling said peripheral device to the computing device so that said computing device can drive said directional speaker to produce the audio sound.

17. (Currently Amended) A peripheral device as recited in claim 16, wherein said directional speaker is integral said housing, and wherein when said peripheral device is operatively connected to said computing device, said computing device directs audio signals to said peripheral device.

18. (Previously presented) A peripheral device as recited in claim 16, wherein said peripheral device further comprises a cable that connects said peripheral device to said computing device via a connector or plug.

19. (Previously presented) A peripheral device as recited in claim 16, wherein said peripheral device further comprises a camera.

20. (Previously presented) A peripheral device as recited in claim 16, wherein said housing is configured as a peripheral bus plug-in card.

21. (Currently Amended) A peripheral device as recited in claim 16, wherein ~~said housing includes a peripheral port connector~~ is a USB connector.

PATENT

22. (Currently Amended) A method for automatically selecting one or more of a plurality of potential speakers associated with an audio output device, said method comprising:

obtaining a piece of information pertaining to the audio output device;

determining an appropriate one or more of the potential speakers to output an audio output from the audio output device based on the piece of information; and

selecting the appropriate one or more of the potential speakers,

wherein at least one of the speakers is a directional speaker and at least one of the speakers is a non-directional speaker, and

wherein said determining determines whether the appropriate one or more of the potential speakers are to be directional, non-directional or both based on the piece of information.

23. (Previously presented) A method as recited in claim 22, wherein the piece of information is related to how the audio output device is presently being used.

24. (Previously presented) A method as recited in claim 22, wherein the piece of information is related to an orientation of the audio output device.

25. (Previously presented) A method as recited in claim 22, wherein the piece of information is related to a distance from the audio output device to a surface.